

STATE OF COLORADO

Roy Romer, Governor
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Dedicated to protecting and improving the health and environment of the people of Colorado

HAZARDOUS MATERIALS AND WASTE MANAGEMENT DIVISION

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Colorado Department
of Public Health
and Environment

May 26, 1998

Certified Mail # P 335 619 003

Ms Jessie Roberson
United States Department of Energy
Rocky Flats Environmental Technology Site
P.O. Box 464
Golden, Co 80402-0464

RE: Compliance Advisory for Unit #13, 90-day Accumulation Areas, Unit #1, RFETS
Manifest Review, Unit #15A and Unit #10

Dear Ms. Roberson:

On six inspections between February 26, 1998 and May 8, 1998, inspectors from the Colorado Department of Public Health and Environment, Hazardous Materials and Waste Management Division (the "Division") conducted compliance evaluations in the following areas: 90-day Accumulation Areas, Unit #13, Unit #1, RFETS Manifest Review, Unit #15A and Unit #10. Unfortunately, as a result of these inspections the Division feels that we must issue the attached Compliance Advisory. This Compliance Advisory identifies deficiencies including failure to make an adequate hazardous waste determination and failure to segregate incompatible waste. It also identifies the required corrective actions associated with the management of waste chemicals in these units.

During these inspections the Division requested clarification regarding the management of numerous legacy waste chemicals (chemicals packaged prior to the Waste Chemical Consent Order) identified in the above named units. Also requested was additional information regarding unclear and inconsistent data contained within the waste travelers for numerous waste chemicals. The requested information substantiated problems which included information regarding mischaracterization of waste chemicals, the storage of incompatible waste, chemicals that were determined to be non-hazardous and then changed to hazardous, waste chemicals that were determined to be hazardous and then changed to non-hazardous, and chemicals that appeared to be air and water reactive.

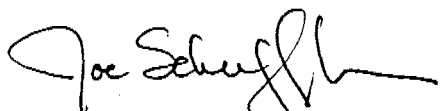
ADMIN RECORD

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IA-A-000397

The attached Compliance Advisory is being issued because the inspectors have determined that approximately 1/3 of the waste chemical containers evaluated during inspections have been incorrectly characterized. This has resulted in several cases where incompatible waste chemicals are contained within the same container. The Division believes the past characterization and storage of legacy waste is a bigger problem than has been identified through inspection given that we only examined a small percentage of the legacy waste containers. This Compliance Advisory serves as a mechanism for the Division to document and ensure that appropriate waste management activities for legacy waste chemicals are investigated and completed in a reasonable time frame. We appreciate RMRS' efforts to provide documentation and information regarding the inspector's comments on the Notice of Inspections provided during the previously named inspections.

Please contact Cynthia Burbach of my staff at (303) 692-3315 if you have questions regarding this matter.

Sincerely,

A handwritten signature in black ink, appearing to read "Joe Schieffelin", with a stylized, flowing script.

Joe Schieffelin, Unit Leader
Federal Facilities Permitting and Compliance
Hazardous Materials & Waste Management Division

cc:	Dan Miller, AGO	Sandi MacLeod, DOE
	Tim Rehder, EPA	Bob Cathel, K-H
	Janice Pearson, EPA	Karan North, K-H



Colorado Department
of Public Health
and Environment

COMPLIANCE ADVISORY

FACILITY: Rocky Flats Environmental Technology Site	EPA ID #: C07890010526	DATE: May 26, 1998
	ADDRESS: P.O. Box 928	
	Golden, Colorado 80402	

This Compliance Advisory provides notice related to information gained during inspection of the above named facility. We advise you that the inspector(s) believes that the "Deficiencies" listed below are violations of Colorado's hazardous waste laws and the "Potential Deficiencies" listed below may be violations of Colorado's hazardous waste laws. Division personnel will review the facts established during this inspection and this notice may be revised to include additions or clarifications as a result of that review.

Please be aware that you are responsible for complying with the State hazardous waste regulations and that there are substantial administrative and civil penalties for failing to do so. Section 25-15-309, C.R.S. provides that any person who violates Section 25-15-308, C.R.S., which includes the Colorado Hazardous Waste Act ("the Act"), Sections 25-15-101 to 316, C.R.S., and the Colorado Hazardous Waste Regulations, 6 CCR 1007-3, may be subject to an administrative penalty of not more than \$15,000 per violation per day during which such violation occurs or to a civil penalty of not more than \$25,000 per violation per day during which such violation occurs. The issuance of this Compliance Advisory does not limit or preclude the Department from pursuing its enforcement options concerning this inspection including issuance of a Compliance Order and assessment of penalties. Also, this Compliance Advisory does not constitute a bar to enforcement action for conditions that the inspector(s) did not observe or evaluate, or conditions found during future inspections of your facility.

To avoid additional enforcement action or reduce the penalties described above you must either correct the "Deficiencies" and "Potential Deficiencies" within a reasonable time, or you must demonstrate to the Division that the "Deficiencies" and "Potential Deficiencies" are not violations of Colorado's hazardous waste laws.

To close out this Compliance Advisory, we encourage you to contact the Compliance Officer listed below, and where necessary, schedule a meeting:

- A) To discuss the Compliance Advisory and answer any questions you may have;
- B) To develop a schedule for correcting the "Deficiencies" and "Potential Deficiencies"; or
- C) To submit information necessary to successfully show that the "Deficiencies" and "Potential Deficiencies" (or any of them) are not violations of Colorado's hazardous waste laws.

Ms Cynthia Silva Burbach, Compliance Officer
Hazardous Materials and Waste Management Division
Colorado Department of Public Health & Environment
Mail Code: HMWMD-HWC-B2
4300 Cherry Creek Drive South
Denver, Colorado 80222-1530
Tel: (303) 692-3386

Failure to respond in a timely fashion to this Compliance Advisory will be considered in any subsequent enforcement action and the assessment of administrative and/or civil penalties.

COMPLIANCE ADVISORY

FACILITY: Rocky Flats Environmental Technology Site	EPA ID #: CO7890010526	DATE: May 26, 1998
DEFICIENCIES, POTENTIAL DEFICIENCIES, OR CONCERNS NOTED AND REQUIRED ACTIONS		
<p>Requirement: A generator of a solid waste must determine that waste is a hazardous waste in accordance with the methods in §262.11(a)-(c).</p> <p>Deficiency: On six inspections between February 26, 1998 and May 8, 1998, Division inspectors identified deficiencies (mis-characterizations) with numerous legacy waste chemicals. These deficiencies represent a failure to make an accurate hazardous waste determination. (see attached table)</p> <p>Requested Action: Within forty five days submit to the Department a plan to ensure appropriate waste management of legacy waste chemicals identified in the attached tables and for all legacy waste chemicals yet to be evaluated. This plan should detail how RFETS plans to address mis-characterized waste, and should include a schedule with a date for completing necessary actions for each waste chemicals listed, and for the review of all legacy waste chemicals currently stored at RFETS. This information must be submitted within 45 days of receipt of this Compliance Advisory.</p> <p>Requirement: A generator of hazardous waste must ensure that incompatible wastes are not placed in the same container. 6CCR1007-3, Section 265.177.</p> <p>Deficiency: At the time of the following inspections: March 12, 1998, March 27, 1998, April 2, 1998, April 9, 1998, April 10, 1998, May 5, 1998, May 7, 1998 and May 8, 1998, deficiencies were identified in the following units: Unit #1, Unit #13, Unit #15 A and Unit #10. These deficiencies represent a failure to segregate incompatible hazardous waste. (see attached table)</p> <p>Requested Action: Within forty five days submit to the Department a plan to ensure appropriate waste management of incompatible waste chemicals. This plan should detail how RFETS plans to identify and segregate incompatible legacy waste chemicals placed within the same container. The plan should include a schedule with a date for completing necessary actions for each deficiency and for the review all legacy waste chemicals currently stored at RFETS that have not yet been checked for potential storage of incompatible materials. This information must be submitted within 45 days of receipt of this Compliance Advisory.</p>		

TABLE #1 COMPLIANCE ADVISORY DEFICIENCIES
Failure To Make An Accurate Hazardous Waste Determination

LOCATION	DATE OF NOI	CATEGORY
90 Day Area; (750 Haz 2205)	02/26/98	A 500 ml container of Phosphorous pentoxide (750HAZ-2205) was marked as non hazardous. This chemical is water reactive (D003) and should be managed as a hazardous waste (P2 reactive).
Unit # 1	03/27/98 & 04/02/98	Container # X02560 and container # X01549 contain Aluminum Chloride Anhydrous, which is water reactive. This chemical is characterized as non-hazardous waste, but should be assigned EPA code D003 (Reactive).
Unit # 1	03/27/98 & 04/02/98	Container # X01798 containing Diethylhexyl Phosphoric Acid is characterized as D002 (Corrosive), but like waste in a 90-day unit in Bldg #123 is characterized as non-hazardous.
Manifest Review	4/09/98 & 4/10/98	Manifest # 00020 dated 2/16/98 shows a compressed gas (Nitrogen, Carbon Tetrachloride) as non-regulated, but the un-used calibration gas should have been designated as U211.
Manifest Review	4/09/98 & 4/10/98	Container # CWM 90069 contains Bis 2-ethylhexyl phosphate (diisooctyl acid phosphate) it was determined to be non-hazardous, but was later assigned EPA code D002 (Corrosive).

TABLE #1 COMPLIANCE ADVISORY DEFICIENCIES
Failure To Make An Accurate Hazardous Waste Determination

LOCATION	DATE OF NOI VIOLATION	CATEGORY
Unit #15A	05/05/98 & 05/07/98	Container # X03007 was originally designated with EPA codes F008, F009, F007, D006 and D011. This chemical was later characterized non-hazardous.
Unit #13	03/12/98	Container # 90682 containing Vanadium Pentoxide was assigned the EPA code D001 (Ignitable). The waste chemical should carry the listed waste code P120.
Unit # 1	03/27/98 & 04/02/98	Container # X08708 contains OSPHO Metal Treatment, which should contain EPA code D007 for Chromium.
Unit # 1	03/27/98 & 04/02/98.	Container # D88889 "Marking Pen Ink (Black)" does not contain the EPA code D026 for cresols.
Unit # 1	03/27/98 & 04/02/98	Container # D84669 contains Electroless Silver Strike, but the container does not carry the listed waste code P104 for Silver cyanide "gold bath" package #W04741.
Unit # 1	03/27/98 & 04/02/98	Container # X08457 contains a waste chemical that was incorrectly characterized with codes P030 and D002 (Corrosive). This waste chemical should carry the listed waste code P030 and EPA code D003.

TABLE #1 COMPLIANCE ADVISORY DEFICIENCIES
Failure to Make An Accurate Hazardous Waste Determination

LOCATION	DATE OF NOI VIOLATION	CATEGORY
Unit #15A	05/05/98 & 05/07/98	Container # X06038 and Container # X02379 contain Chromium Powder, but EPA code D001 (Ignitable) is excluded. The MSDS show that this chemical explodes spontaneously in air.
Unit # 15A	05/05/98 & 05/07/98	Container # X03179 contains P-Toluene sulfonyl Chloride, but is missing EPA code D003 (Reactive). The attached MSDS states that water hydrolyzes the chemical and forms an acidic gas.
Unit # 15A	05/05/98 & 05/07/98	Container # D8418 contains Aluminum Chloride Anhydrous, but is missing EPA code D003 (Reactive). This chemical has been determined to be water reactive and therefore should carry EPA code D003.
Unit # 15A	05/05/98 & 05/07/98	For container # D84173 the waste traveler indicates that EPA code D001 (Ignitable) applies, but the WEMS report indicates only EPA code D003 (Reactive).
Unit # 10	05/08/98	Containers # D80158 and # X10542 contain Ethyl Chloroformate. The MSDS states that this chemical is a peroxide former. This chemical was designated as D001 (Ignitable) and D002 (Corrosive), but should be D003 (Reactive).

TABLE #1 COMPLIANCE ADVISORY DEFICIENCIES
Failure to Make An Accurate Hazardous Waste Determination

LOCATION	DATE OF NOI VIOLATION	CATEGORY
Unit # 10	05/08/98	Container # D82473 holds a container of Alcohol and Chloroform. EPA code D001 (Ignitable) is applicable to this waste, but the WEMS report does not include D001.
Unit # 10	05/08/98	Container # D82097 contains unused 1,1,1 Trichloroethane and unused Methylene Chloride with an assigned EPA code of F002. It appears the EPA codes should be U080 and U226.
Unit # 10	05/08/98	Container # D84172 contains Trimethyl Borate designated as D001. The MSDS states that this chemical decomposes in water to form flammable methanol and boric acid. It appears that EPA code D003 applies. This container also contains a bottle of Xylene designated as D001 and if unused should carry the waste code U239.
Unit # 10	05/08/98	Container # X04927 contains Acetyl Bromide designated as D002 (Corrosive). This chemical reacts violently with water to form Hydrogen Bromide gas. This chemical should carry EPA code D003 (Reactive).

TABLE #1 COMPLIANCE ADVISORY DEFICIENCIES Failure to Make An Accurate Hazardous Waste Determination		
LOCATION	DATE OF NOI VIOLATION	CATEGORY
Unit # 10	05/08/98	Container # D79886 contains GP-811 glass coating solution. The attached MSDS states that GP-811 contains 26% lead chemically combined with borosilicate frit. This chemical should be assigned waste code D008 (Lead).
Unit # 10	05/08/98	Container # D82839 was assigned EPA codes F002 and F003. Since the IDC is for waste chemicals the codes appear to be incorrect.
Unit # 10	05/08/98	Container # D82845 contains unused Methanol mixed with unused Butanol. The listed waste code U154 should apply to Methanol..
Unit # 10	05/08/98	Container # X 02484 contains acid/etch solutions with a compatibility code of 1B, but is missing the waste code D002 (Corrosive).

TABLE #2 COMPLIANCE ADVISORY DEFICIENCIES Failure to Segregated Incompatible Waste		
LOCATION	DATE OF NOI VIOLATION	CATEGORY
Unit #13	03/12/98	Container #X07113 should carry the compatibility code N/A. The label on the container indicates a compatibility code of 3A.
Unit #1	03/27/98 & 4/02/98	Incompatible waste chemicals are contained within container number # X08708. Glacial Acetic Acid is incompatible with nitric acid and strong oxidizers such as sodium dichromate.
Unit #15A	05/05/98 & 05/07/98	Container # X03234 contains Potassium Chlorate which should have a compatibility code of 6A, but the label showed a compatibility code of NA.
Unit #15A	05/05/98 & 05/07/98	Container # X02187 contains waste characterization information for Mercuric Chloride, which is incompatible with metal salts. Barium chloride and gold cyanide are metal salts and are stored in the same container.
Unit #15A	05/05/98 & 05/07/98	Container # X03278 contains Ebonol C 50% Sodium Chlorite and Sodium Hydroxide. The container indicates that the code is NA, but the correct compatibility code should be 6A.

TABLE #2 COMPLIANCE ADVISORY DEFICIENCIES
Failure to Segregate Incompatible Waste

LOCATION	DATE OF NOI	CATEGORY
Unit #10	05/08/98	Container # D82634 contains Mercurous Chloride, which is incompatible with Metallic Salts. This container also contains Barium Chloride and other metal salts, which are incompatible with Mercurous Chloride.
Unit # 1	03/27/98 & 04/02/98	Container # X08457 contains a waste chemical that was incorrectly characterized with codes P030 and D002 (Corrosive). This waste chemical should carry the waste listed code P030 and EPA code D003.